

CLAIM AMENDMENTS:

Please amend claims 1, 5, 6, 24, 27 and 28 as follows (claims 1 to 8 and 24 to 30 are reproduced below in their entirety for the Examiner's convenience):

1. (Amended) An optical lens, comprising:

a substrate made of an optical material which has a continuous flat face on a first side through which an axis in a focus direction of said optical lens passes;

and

a convex element formed integrally with said substrate and having a convex curved face that protrudes from a second side of said substrate opposite from said first side so as to have a function as an optical lens;

said curved face of said convex element having a first curvature on a first cross section including the an axis in the a focus direction of said optical lens and a second curvature on a second cross section perpendicular to said first cross section and intersecting with said first cross section along the axis in the focus direction, the second curvature being different from the first curvature.

2. (Unchanged) An optical lens according to claim 1, wherein a focal length of said optical lens on said first cross section and a focal length of said optical lens on said second cross section are different from each other.

3. (Unchanged) An optical lens according to claim 1, wherein the shapes

of said convex element on said first and second cross sections are symmetrical with respect to the axis in the focus direction.

4. (Unchanged) An optical lens according to claim 1, wherein the shapes of said convex element on said first and second cross sections are shapes of arcs substantially of ellipses.

5. (Amended) An optical lens according to claim 1, wherein said substrate has a flat face on said second side thereof surrounding ~~on which~~ said convex element ~~is formed~~.

6. (Amended) An optical lens according to claim 1, wherein a groove is formed in said second side of said substrate along a boundary between said flat face on the second side of the substrate and said convex element.

7. (Unchanged) An optical lens according to claim 6, wherein said groove has a substantially elliptical shape.

8. (Unchanged) An optical lens according to claim 6, wherein said groove has a substantially rectangular shape.

24. (Amended) An optical pickup apparatus which irradiates light upon an optical recording medium and receives reflected light from the optical recording medium, comprising:

a light emitting element for emitting light;

a light receiving element for receiving the light emitted from said light emitting element; and

an optical member for introducing the light emitted from said light emitting element so as to be irradiated upon the optical recording medium and introducing the reflected light from the optical recording medium to said light receiving element;

said optical member including an optical lens, comprising:

a substrate made of an optical material which has a continuous flat face on a first side through which an axis in a focus direction of said optical lens passes;

and

a convex element formed integrally with said substrate and having a convex curved face that protrudes from a second side of said substrate opposite from said first side so as to have a function as an optical lens;

said curved face of said convex element having a first curvature on a first cross section including the axis in the focus direction of said optical lens and a second curvature on a second cross section perpendicular to said first cross section and intersecting with said first cross section along the axis in the focus direction,

the second curvature being different from the first curvature,

~~which includes a substrate made of an optical material and a convex element formed integrally with said substrate and having a convex curved face so as to have a function as an optical lens, said convex element being configured such that a focal length on a first cross section including an axis in a focus direction of said optical lens and a focal length on a second cross section perpendicular to said first cross section and intersecting with said first cross section along the axis in the focus direction are different from each other.~~

25. (Unchanged) An optical pickup apparatus according to claim 24, wherein the shapes of said convex element on said first and second cross sections of said optical lens are symmetrical with respect to the axis in the focus direction.

26. (Unchanged) An optical pickup apparatus according to claim 24, wherein the shapes of said convex element on said first and second cross sections of said optical lens are shapes of arcs substantially of ellipses.

27. (Amended) An optical pickup apparatus according to claim 24, wherein said substrate of said optical lens has a flat face on said second side thereof surrounding ~~which~~ said convex element ~~is formed~~.

28. (Amended) An optical pickup apparatus according to claim 24, wherein a groove is formed in said second side of said substrate along a boundary between said flat face on the second side of the substrate and said convex element of said optical lens.

29. (Unchanged) An optical pickup apparatus according to claim 28, wherein said groove of said optical lens has a substantially elliptical shape.

30. (Unchanged) An optical pickup apparatus according to claim 28, wherein said groove of said optical lens has a substantially rectangular shape.